REVIEWS OF BOOKS

EUGENICS

Armstrong, C. Wicksteed. *Road to Happiness.* London, 1951. Watts. Pp. 245. Price 17s. 6d.

MR. ARMSTRONG, when he wrote this book, was approaching his eightieth birthday. For more than fifty years, he has been Headmaster of large boarding schools in Latin countries. Three eminent Brazilians, well known outside the American continent, are named as having learned from him. His book is dedicated to nine grandchildren and to " my five thousand pupils, now scattered over the face of the globe, to whose service my life has been willingly devoted."

The title of an earlier book *Paradise Found* and the title of this book reveal the author as a moral idealist. When, some two years ago, Mr. Armstrong paid me the compliment of consulting me about the possibilities of publication, he told me that this book was his testament and that his life would be incomplete if no publisher could be found. It is desirable and praiseworthy, in one's declining years, to assess one's experiences and, for the benefit of descendants (for whom their forebears are all too often but names), to record what one has made of life. Life in retrospect appears to some meaningless—a tale told by an idiot ; by others a cohering thread is discernible ; yet others, like the author, can distill from it what they feel to be a message. Mr. Armstrong's long life has given him opportunities of observing people of all ages and many nationalities, and of wielding over a long period a formative influence on thousands of boys. His conclusions thus command respect.

The architects of ideal republics and utopias can build according to two different plans. They can think of the world as inhabited by people like themselves ; the paradise then found is the sort of place where they would themselves be content ; the road to happiness is the road they themselves would like to travel. Or they can survey their fellow human beings with detached and critical eyes ; these are then apt to be seen in the mass as covetous, quarrelsome, promiscuous and slothful ; as improvident, suggestible, deceitful and cruel ; as timorous, suspicious, inconstant, stupid and weak. A minority is recognised as actively evil ; another minority as noble and good. Collectively, they are sheep needing a shepherd, for whom the road to happiness leads to plentiful pastures where, protected by watchdogs and surrounded by high palisades, they can eat, sleep and mate in peace. In Mr. Armstrong, the idealist and the realist compete in depicting the promised land ; but there is an uneasy truce between the two. The idealist predominates and sounds the main theme. The realist is heard as an angry commentator, interjecting impatient remarks, and railing at restrictions, cruelties, stupidities and injustices which, if only people were better than they are, would not exist.

The supreme goal of men's earthly life, says Mr. Armstrong, is not pleasure but happiness ; happiness is to be attained only through the building up of character of which the determining factor is altruism. This happiness, attainable through altruism, is seen as the goal of a purposive evolution, of a " Divine Plan of Evolution," as something which an " all-beneficent Author of Nature has planned for Mankind through evolution." Happiness through altruism is to be attained by " new ideology " wherein freedom is a *sine qua non* and free will is used to the full. For " Nature did everything possible to make this earth a paradise, and only man makes it a vale of tears by misusing the most valuable of all God's gifts, which is free will." Most human troubles are caused by the three plagues of war, disease and intolerance. For these, God is not responsible, but our own stupidity and malice (the realist here speaks). Wars are mainly caused by nationalism, a high - sounding name for national selfishness, opposed to the ideal of altruism. Disease is mostly due to man's folly in neglecting the laws of health and the

principles of eugenics, and is likely to be aggravated by the spurious benefits of National Insurance. But of the three plagues, intolerance is perhaps the worst. It is responsible for " the perennial tragedy of youth in regard to sex and for the life-long frustration of spinsterhood " ; to it is attributable " the crucifixion of the flesh extolled by the priesthoods " ; and it is the negation of both freedom and altruism. Freedom (for the attainment of which the formation of a political " Freedom Party " is proposed) should be extended beyond the four freedoms of the Atlantic Charter ; it should include the right to work without vexatious restrictions, the right of free movement (no restrictions on travel and migration), freedom from red tape and form-filling, free monetary exchange, free trade, and a wider freedom for love.

The demands of freedom require a simplification of the penal code and the abolition of lawyers. " A class of scholars paid to prove that black is white by means of sophisms is not needed, and is wholly inconsistent with the administration of pure justice . . . legislation should be reduced to a minimum, so that, with the assistance of simple and concise codes, any normal man should be able to defend himself . . . ninety per cent of existing laws should be repealed, and . . . there should be no professional politicians." Thus speaks the idealist. But democracy, wherein many people find a guarantee of freedom, comes in for severe castigation. As an instance of its futility, Mr. Armstrong quotes the need for eugenic reform. " Why," he writes, " should the proletariat, who form the majority, ever recognise that it is largely unfit to procreate, and voluntarily impose restrictions upon its own liberty in such matters ? What do the masses care about future generations—or if any of them do, how many have ever heard about eugenics? " Here are the acrimonious tones of the realist (perhaps even of the surrealist), who seems to think that the proletariat, who form the majority, are unfit to wield the basic freedom of controlling their own reproduction. The " Freedom Party " would presumably exclude the proletariat.

Dr. Armstrong's failure to bring his idealism and realism into harmony seems to be connected with what some readers may feel to be the exaggerated character of each. Is the proletariat as big and bad as all that ? Is it largely unfit to procreate ? Is it not entitled to a share of our altruism ? Is it to be excluded from the road to happiness ? And are the rest of us (who are not proletarians) so morally advanced that we could live peacefully and profitably in the state of utopian anarchy which Mr. Armstrong depicts ?

But it may be that I have drawn attention to an inessential feature of Mr. Armstrong's book, which will be found to have many points of interest for eugenists. Mr. Armstrong does not ignore the shortcomings of human nature. He sees them clearly enough. But he regards them as remediable by eugenics. Indeed, it is the task of eugenics to prepare the road to happiness and to find paradise by raising, as Galton put it, " the average quality of our nation to that of its better moiety. The general tone of domestic, social and political life would then be higher," wrote Galton ; " the race as a whole would be less foolish, less frivolous, less excitable and politically more provident than now. Its demagogues who ' played to the gallery ' would play to a more sensible gallery than at present." In such a stable and enlightened community, Mr. Armstrong's Freedom Party could attain some at least of its objects. Mr. Armstrong could claim that he was at one with Galton in regarding eugenics as providing the means of attaining this desirable end. The difference, if any exists, is over the matter of tempo. Galton believed that the human breed was improvable by eugenics, but that " existing conditions of law and sentiment " needed to be carefully observed. " It is above all things needful for the successful progress of eugenics," Galton wrote two years before his death, having outlived an earlier phase of impatient enthusiasm, " that its advocates should move discreetly and claim no more efficacy on its behalf than the future will confirm ; otherwise a reaction will be invited." The passages here quoted from

Galton guide the *Eugenics Society*. They are printed on the inside of the cover of our *Statement of Objects*.

The reader of Mr. Armstrong's book who visualises the road to happiness therein charted as a long and pitted road, with many windings, sharp turns, steep climbs and sharp descents, in short, as an arduous and difficult road which will take a suffering humanity many hundreds of years at least to travel, such a reader will find in the country finally reached at the journey's end much to stimulate and even inspire him. Posterity may well be as grateful to Mr. Armstrong for his testament as are his numerous pupils for the kindly and sympathetic guidance they have received from him during his life.

C. P. BLACKER.

GENETICS

Catcheside, D. G. *The Genetics of Micro-Organisms*. London, 1951. Pitman. Pp. vii + 223. Price 21s.

ONLY a decade ago, the genetics of micro-organisms had scarcely been touched. Then, in 1941, the production of the first biochemical mutants in the bread mould *Neurospora* touched off a chain reaction of discoveries in various fields which has not yet come anywhere near its end. The analysis of biochemical mutants in moulds, in yeasts and in bacteria has opened up a field which is equally important for the understanding of primary gene action and for the elucidation of intermediate metabolism; in fact, we are now witnessing the coalescence between genetics and biochemistry which is scarcely less fundamental than that between genetics and cytology. The adaptive fermentation of yeasts, the genetics of antigenic differences and of the "killer" character in *Paramecium*, the acquisition of resistance to penicillin, to sulphonamides and to bacteriophages by bacteria, the antigenic transformations of *Pneumococci*, the sexual reproduction and crossing-over in bacteria, to mention only a few of the more important discoveries of the last few years, all these and other new facts have hardly started to find their way into the text-books of genetics. Indeed, new discoveries are published at a rate which makes it very difficult for the non-specialist to keep pace with this breath-taking advance.

Under these circumstances, the publication of this authoritative, critical, clear and balanced account of the field as a whole was an urgent necessity not only for geneticists but also for biochemists, microbiologists and virologists. Complete with its classified bibliography of about 260 titles, this is a book of the utmost usefulness which will find a wide circulation.

H. GRÜNEBERG.

Hallgren, Bertil. *Specific Dyslexia ("Congenital Word-Blindness"); A Clinical and Genetic Study*. Copenhagen, 1950. Ejnar Munksgaard. Pp. 287. *Acta Psychiatrica et Neurologica Supplementum* 65.

THE author set himself the following tasks: 1. To determine the existence of hereditary specific dyslexia. 2. In the event of the disability proving hereditary, to make a genetic statistical analysis and to determine the mode of inheritance. 3. To carry out a clinical analysis of the disability with special regard to certain physical, mental and environmental factors. The author's diagnostic criteria were: reading and writing difficulties; a discrepancy between proficiency in these subjects and in other school subjects; a discrepancy between writing and reading on the one hand, and the general intelligence on the other hand. The reading and writing tests used were not standardized. The diagnosis was not made on the basis of test results only. In a number of parents and older siblings of probands it was obvious to the author that specific dyslexia had become compensated. A positive history of reading and writing disability was taken as the most important diagnostic criterion. The author's material, which was derived from a child guidance clinic and a grammar school, consisted of 276 cases of specific dyslexia; 116 probands and 160 secondary cases (siblings and parents of probands). In